BRITISH JOURNAL

OF

HAEMATOLOGY

EDITOR

I. CHANARIN

ASSISTANT EDITORS

A. L. Bloom, J. Cawley, J. M. Goldman
C. A. Ludlam, W. G. Wood

EDITORIAL BOARD

Allan Jacobs *Chairman*
A. J. Bellingham, N. M. Blackett, Milica Brozovic
D. Catovsky, N. Crawford, Pauline M. Emerson
E. C. Gordon-Smith, M. F. Greaves, A. V. Hoffbrand
G. A. McDonald, C. R. Rizza, C. J. F. Spry
A. H. Waters, D. J. Weatherall, J. M. White
J. A. Whittaker, S. Wickramasinghe, M. Worwood
J. S. Lilleyman *representing the British Society for Haematology*

VOLUME 51

Pages 1–676

BLACKWELL SCIENTIFIC PUBLICATIONS
OXFORD LONDON EDINBURGH BOSTON MELBOURNE
1982

PUBLISHED BY BLACKWELL SCIENTIFIC PUBLICATIONS LTD, OSNEY MEAD, OXFORD

Printed in Great Britain at the Alden Press, Oxford

BRITISH JOURNAL

of

HAEMATOLOGY

Vol. 51 No. 1 May 1982

R. BARTL, B. FRISCH, R. BURKHARDT, G. HOFFMANN-FEZER, K. DEMMLER and M. SUND. Assessment of marrow trephine in relation to staging in chronic lymphocytic leukaemia 1

KENNETH A. SCHWARTZ, SHERRILL J. SLICHTER and LAURENCE A. HARKER. Immune-mediated platelet destruction and thrombocytopenia in patients with solid tumours 17

D. P. THOMAS, ROSEMARY E. MERTON, K. F. HILLER and D. HOCKLEY. Resistance of normal endothelium to damage by thrombin 25

YVONNE STIRLING, D. J. HOWARTH, R. STOCKLEY, R. BLAND, C. M. TOWLER and S. M. HARDING. Comparison of the bioavailabilities and anticoagulant activities of two warfarin formulations 37

K. B. THOMAS, M. A. HOWARD, J. KOUTTS and B. G. FIRKIN. Simplified immunoradiometric assay for factor VIII coagulant antigen 47

E. KANAVAKIS, A. METAXOTOU-MAVROMATI, C. KATTAMIS, M. AKSOY, D. J. WEATHERALL and W. G. WOOD. Globin gene mapping in normal Hb A_2 types of β-thalassaemia 59

CHARLES A. HALL and JAMES A. BEGLEY. Atypical cobalamin binding in the serum of congenital deficiency of transcobalamin II 65

T. R. J. LAPPIN, G. E. ELDER, G. A. SAVAGE, P. J. COOKE and J. M. BRIDGES. The *in vitro* effect of adenine on pyruvate kinase-deficient red cells 73

R. CRAMER, M. R. SORANZO, P. DRI, G. D. ROTTINI, M. BRAMEZZA, S. CIRIELLI and P. PATRIARCA. Incidence of myeloperoxidase deficiency in an area of northern Italy: histochemical, biochemical and functional studies. 81

M. SYMANN, M. A. ANCKAERT, M. HUYBRECHTS, J. NINANE, J. L. CANON and G. SOKAL. *In vivo* stimulation and inhibition of granulopoiesis: the effect of an inflammatory reaction on murine diffusion chamber granulopoiesis 89

THALIA BOUSSIOS, WILLIAM R. MCINTYRE, ALBERT S. GORDON and JOHN F. BERTLES. Receptors specific for thyroid hormones in nuclei of mammalian erythroid cells: involvement in erythroid cell proliferation 99

H. ADVANI, J. ZAMOR, W. J. JUDD, C. L. JOHNSON and W. L. MARSH. Inactivation of Kell blood group antigens by 2-aminoethylisothiouronium bromide 107

A. G. GRAY, B. J. BOUGHTON, D. S. BURT and G. R. STRUTHERS. Basophils, histamine and gastric acid secretion in chronic myeloproliferative disorders 117

M. HOUSSET, M. T. DANIEL and L. DEGOS. Small doses of ARA-C in the treatment of acute myeloid leukaemia: differentiation of myeloid leukaemia cells? 125

W. VAINCHENKER, J. GUICHARD, J. F. DESCHAMPS, J. BOUGUET, M. TITEUX, J. CHAPMAN, A. J. MCMICHAEL and J. BRETON-GORIUS. Megakaryocyte cultures in the chronic phase and in the blast crisis of chronic myeloid leukaemia: studies on the differentiation of the megakaryocyte progenitors and on the maturation of megakaryocytes *in vitro* 131

DAVID BEVAN, MICHAEL ROSE and MELVYN GREAVES. Leukaemia of platelet precursors: diverse features in four cases 147

SHORT COMMUNICATIONS

G. WIJNGAARDS, C. KLUFT and E. GROENEVELD. Demonstration of urokinase-related fibrinolytic activity in human plasma 165

I. CHANARIN and M. MUIR. Demonstration of vitamin B_{12} analogues in human sera not detected by microbiological assay 171

CORRESPONDENCE

P. HERNANDEZ, J. CARNOT and C. CRUZ. Chronic myeloid leukaemia blast crisis with T-cell features 175

D. R. HIGGS, J. LAMB, B. E. ALDRIDGE, J. B. CLEGG, D. J. WEATHERALL, B. E. SERJEANT and G. R. SERJEANT. Inadequacy of Hb Bart's as an indicator of α thalassaemia 177

PHILIPPE SCHNEIDER, FRANÇOISE DELACRÉTAZ, RAFICK-PIERRE SEKALY, PETR CECH and CATHERINE LIBANSKA. High percentage of proliferating cells in a splenectomized patient with a B-prolymphocytic leukaemia 178

Vol. 51 No. 2 **June 1982**

ANNOTATION. RONALD D. BARR and JOHN A. MCBRIDE. Haemopoietic engraftment with peripheral blood cells in the treatment of malignant disease 181

J. M. BENNETT, D. CATOVSKY, M. T. DANIEL, G. FLANDRIN, D. A. G. GALTON, H. R. GRALNICK and C. SULTAN, THE FRENCH–AMERICAN–BRITISH (FAB) CO-OPERATIVE GROUP. Proposals for the classification of the myelodysplastic syndromes 189

HILAL MAALLEM, KELVYN SHEPPARD and JOHN FLETCHER. The discharge of primary and secondary granules during immune phagocytosis by normal and chronic granulocytic leukaemia polymorphonuclear neutrophils 201

J. H. BUTTERFIELD, A. B. EISENBREY and G. J. GLEICH. Membrane marker characterization of the eosinophil colony-forming cell 209

SHUSHI KANEKO, SEIJI MOTOMURA and HIROSHI IBAYASHI. Differentiation of human bone marrow-derived fibroblastoid colony forming cells (CFU-F) and their roles in haemopoiesis *in vitro* 217

A. C. FELLER, C. J. HEIJNEN, R. E. BALLIEUX and M. R. PARWARESCH. Enzyme histochemical staining of Tμ lymphocytes for glycyl-proline-4-methoxy-beta-naphthylamide-peptidase (DAP IV) 227

M. LUMB, JANET PERRY, ROSEMARY DEACON and I. CHANARIN. Urinary folate loss following inactivation of vitamin B_{12} by nitrous oxide in rats 235

D. K. BOWDEN, L. PRESSLEY, D. R. HIGGS, J. B. CLEGG and D. J. WEATHERALL. α-Globin gene deletions associated with Hb J Tongariki 243

CHAIM HERSHKO, ROBERT W. GRADY and GABRIELA LINK. Evaluation of iron-chelating agents in an *in vivo* system: potential usefulness of EHPG, a powerful iron-chelating drug 251
CARLOS M. MONZON, JOHN T. PENNISTON, VIRGIL F. FAIRBANKS and E. OMER BURGERT, JR. Erythrocyte calmodulin correlates with red cell age 261
GERARD J. DEN OTTOLANDER, JAN TE VELDE, WIL VEENHOF, KARIN KLEIVERDA, HANS L. HAAK and PIET JAN SPAANDER. Busulphan aplasia in rabbits: a model for human aplastic anaemia 265
JEN C. WANG and MARK S. TOBIN. Mechanism of extramedullary haematopoiesis in rabbits with saponin-induced myelofibrosis and myeloid metaplasia 277
M. WOLF, C. BOYER, J. M. LAVERGNE and M. J. LARRIEU. A new familial variant of antithrombin III: 'Antithrombin III Paris' 285
R. MCMILLAN, D. MASON, P. TANI and G. M. SCHMIDT. Evaluation of platelet surface antigens: localization of the $P1^{A1}$ alloantigen 297
B. BONEU, A. ROBERT, P. SIE, M. ELKOURY, C. LIVERATO, C. CARANOBE and C. NOUVEL. Coulter Counter studies of hypotonic-induced macrothrombocytosis in normal subjects and in idiopathic thrombocytopenic purpura patients 305
C. LALAU KERALY and J. BENVENISTE. Specific desensitization of rabbit platelets by platelet-activating factor (PAF-acether) and derivatives 313
Abstracts of papers presented at a one-day scientific meeting of the British Society for Haematology, London, 8 January 1982 323
CORRESPONDENCE
A. ZACCARIA, G. ROSTI, S. BETTI, N. TESTONI and M. BACCARANI. Normal karyotype in seven patients with paroxysmal nocturnal haemoglobinuria 333
Book Reviews 335

Vol. 51 No. 3 **July 1982**

ANNOTATION. BENT PEDERSEN. Functional and biochemical phenotype in relation to cellular age of differentiated neutrophils in chronic myeloid leukaemia 339
R. BARTL, B. FRISCH, R. BURKHARDT, D. HUHN and R. PAPPENBERGER. Assessment of bone marrow histology in Hodgkin's disease: correlation with clinical factors 345
R. BARTL, B. FRISCH, R. BURKHARDT, A. FATEH-MOGHADAM, G. MAHL, P. GIERSTER, M. SUND and G. KETTNER. Bone marrow histology in myeloma: its importance in diagnosis, prognosis, classification and staging 361
J. MLADENOVIC and J. W. ADAMSON. Characteristics of circulating erythroid colony-forming cells in normal and polycythaemic man 377
CATHERINE NISSEN, YOLANDA MOSER and BRUNO SPECK. Effects of human serum on the release of haemopoietic growth factors 385
D. H. WITTEKIND, VERA KRETSCHMER and INGE SOHMER. Azure B–eosin Y stain as the standard Romanowsky-Giemsa stain 391

A. J. Steed, K. M. Boardman and I. W. Delamore. The role of the cellular sodium pump in human granulopoiesis *in vitro* 395
D. M. Hunt, D. R. Higgs, P. Winichagoon, J. B. Clegg and D. J. Weatherall. Haemoglobin Constant Spring has an unstable α chain messenger RNA 405
S. Abdalla and D. J. Weatherall. The direct antiglobulin test in *P. falciparum* malaria 415
Hisaichi Fujii, Shiro Miwa, Kenzaburo Tani, Noboru Fujinami and Hiroyuki Asano. Overproduction of structurally normal enzyme in man: hereditary haemolytic anaemia with increased red cell adenosine deaminase activity 427
C. E. Gauwerky and D. W. Golde. Lithium enhances growth of human leukaemia cells *in vitro* 431
D. C. Linch, H. Walker, P. Roberts, J. McKinnon, A. H. Goldstone and E. R. Huehns. A chronic myeloproliferative disorder associated with monosomy 7 in the bone marrow cells; normal karyotype in acute transformation 439
J. G. Pegels, F. M. Helmerhorst, E. F. van Leeuwen, C. van de Plas-van Dalen, C. P. Engelfriet and A. E. G. Kr. von dem Borne. The Evans syndrome: characterization of the responsible autoantibodies 445
H. O'Brien, J. A. L. Amess and D. L. Mollin. Recurrent thrombocytopenia, erythroid hypoplasia and sideroblastic anaemia associated with hypothermia 451
Alan R. Giles, Michael E. Nesheim, Hugh Hoogendoorn, Paula B. Tracy and Kenneth G. Mann. Stroma free human platelet lysates potentiate the *in vivo* thrombogenicity of factor Xa by the provision of coagulant-active phospholipid 457
Minoru Okuma, Hiroshi Takayama and Haruto Uchino. Subnormal platelet response to thromboxane A_2 in a patient with chronic myeloid leukaemia 469
I. Poller and D. A. Taberner. Dosage and control of oral anticoagulants: an international collaborative survey 479
B. J. Boughton and A. Simpson. Plasma fibronectin in acute leukaemia 487
SHORT COMMUNICATION
T. Jenkins, T. H. Bothwell, G. Mair and Avril Laidler. Is transferrin normal in idiopathic haemochromatosis? 493
CORRESPONDENCE
R. Willemze, F. E. Zwaan, J. J. Keuning and G. Colpin. Treatment of refractory acute leukaemia with high dose cytosine arabinoside 497
P. J. S. Price, J. M. Jackson and J. B. Stokes. Thymic irradiation in T-cell prolymphocytic leukaemia 498
D. W. Milligan, B. E. Roberts and J. A. Davies. Iron deficiency and whole blood viscosity in polycythaemia 501
D. W. Lane. The influence of iron deficient indices on whole blood viscosity in polycythaemia 503
Book Reviews; Announcement 505

Vol. 51 No. 4 August 1982

CLINICAL ANNOTATION. I. W. DELAMORE. Hypercalcaemia and myeloma 507

R. BARTL, B. FRISCH, R. BURKHARDT, G. KETTNER, G. MAHL, A. FATEH-MOGHADAM and M. SUND. Assessment of bone marrow histology in the malignant lymphomas (non-Hodgkin's): correlation with clinical factors for diagnosis, prognosis, classification and staging 511

E. ÖSBY, L. NORING, R. HAST, K. G. KJELLIN, E. KNUTSSON and Å. SIDÉN. Benign monoclonal gammopathy and peripheral neuropathy 531

E. GLUCKMAN, A. DEVERGIE, A. POROS and P. DEGOULET. Results of immunosuppression in 170 cases of severe aplastic anaemia 541

E. F. VAN LEEUWEN, C. P. ENGELFRIET and A. E. G. KR. VON DEM BORNE. Studies on quinine- and quinidine-dependent antibodies against platelets and their reaction with platelets in the Bernard-Soulier syndrome 551

J. W. N. AKKERMAN, W. VAN BREDERODE, G. GORTER, B. J. M. ZEGERS and W. KUIS. The Wiskott-Aldrich syndrome: studies on a possible defect in mitochondrial ATP resynthesis in platelets 561

P. SCARTEZZINI, G. L. FORNI, M. BALDI, C. IZZO and G. SANSONE. Decreased glycosylation of band 3 and band 4·5 glycoproteins of erythrocyte membrane in congenital dyserythropoietic anaemia type II 569

PHAEDON FESSAS, DIMITRIS LOUKOPOULOS, APHRODITE LOUTRADI-ANAGNOSTOU and GEORGE KOMIS. 'Silent' β-thalassaemia caused by a 'silent' β-chain mutant: the pathogenesis of a syndrome of thalassaemia intermedia 577

J. F. JEMIONEK, R. L. MONROY, T. J. MACVITTIE, T. J. CONTRERAS and S. B. ESPY. Bone marrow reconstitution of lethally irradiated canines using autologous bone marrow fractions obtained by counterflow centrifugation-elutriation 585

T. R. BRADLEY, G. PILKINGTON, M. GARSON, G. S. HODGSON and N. KRAFT. Cell lines derived from a human myelomonocytic leukaemia 595

R. J. ARMITAGE, D. C. LINCH, C. P. WORMAN and J. C. CAWLEY. The morphology and cytochemistry of human T-cell subpopulations defined by monoclonal antibodies and Fc receptors 605

G. TRICOT, A. BROECKAERT-VAN ORSHOVEN, A. VAN HOOF and R. L. VERWILGHEN. Sudan Black B positivity in acute lymphoblastic leukaemia 615

T. SYLWESTROWICZ, A. PIGA, P. MURPHY, K. GANESHAGURU, N. H. RUSSELL, H. G. PRENTICE and A. V. HOFFBRAND. The effects of deoxycoformycin and deoxyadenosine on deoxyribonucleotide concentrations in leukaemic cells 623

T. LYBERG, K. NILSSON and H. PRYDZ. Synthesis of thromboplastin by U-937 cells 631

T. HELSKE, E. IKKALA, G. MYLLYLÄ, H. R. NEVANLINNA and V. RASI. Joint involvement in patients with severe haemophilia A in 1957–59 and 1978–79 643

WOLFGANG MUNTEAN, WM. E. HATHAWAY and ROBERT R. MONTGOMERY. Influence of high molecular weight factor VIII on the measurement of low molecular weight factor VIII procoagulant in different assay systems 649

CORRESPONDENCE

Z. Rolović, I. Elezović, B. Obrenović and C. Rizza. Life-threatening bleeding due to an acquired inhibitor to factor XII–XI successfully treated with 'activated' prothrombin complex concentrate (FEIBA) 659

Marc De Bruyere, Guy Cornu, Jacques Ninane, Dominique Latinne, Anne-Marie Lebacq and Gérard Sokal. HLA DR antigens in childhood acute lymphoblastic leukaemia long survival 659

Blanche P. Alter and David G. Nathan. Haemoglobin synthesis in erythroid culture 661

Antonio Celada. Macrocytosis in pregnancy: iron as limiting factor 662

D. Maharaj, G. A. McDonald and J. W. Dobbie. Splenectomy and blackwater fever 663

Antonio Girolami, Giuseppe Cella, Giovanni M. Patrassi, Renzo Dal Bo Zanon and Fabrizio Fabris. A comment on the classification of factor VII variants 664

Book Reviews; Announcements 666

Author and Subject Indexes to Volume 51 668